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DOCUMENT-IDENTIFIER: US 20020023215 A1
TITLE: Electronic transaction systems and methods therefor

Pre-Grant Publication Date (1):
20020221

Detail Description Paragraph (74):
[0108] One of the preferred embodiments is using an Internet enabled cellular telephone (e.g., a web phone), a wireless PDA or a wireless two way pager to implement the PEAD to perform the above applications. The description below uses an Internet enabled cellular telephone as example of the implementation, and those skilled in the art will understand that the same or similar method can be applied to wireless PDAs and two way pagers. The Internet enabled cellular phone (web phone) can communicate with the Internet through a wireless network. For example, currently SprintPCS provides an Internet phone service using NeoPoint 1000 web phone. The web phone can access the Internet through a wireless gateway, and can contact the hotel's Internet reservation system through the wireless network and Internet. The software and/or firmware controls the PEAD functions running in the web phone is called eSignX Agent (or xAgent for short). xAgent is under the user's control to contact the hotel reservation transaction system. The reservation transaction process includes: (1) the web phone (PEAD) sending out the reservation request (optional using merchant public key [in the example given here, the merchant is the hotel, then it would be the hotel's public key or it's certificate] to encrypt the request; optionally using the user's private key to sign the request); (2) the Merchant acknowledges with the service availability and the cost (optionally, this message can be encrypted using the user's public key and the hotel's private key); (3) once the user approves the transaction, the web phone sends out the transaction confirmation with the credit information and signed by the user's private key (optionally encrypted with the Merchant's public key); (4) once the Merchant validates the transaction, the Merchant sends out the service information as well as the service authorization token (the token could be the electronic room key in the hotel reservation example, the token could be the electronic ticket in the Airline Ticket Reservation and Theater Ticket reservation examples, or the token could be the Supermarket coupon etc.). The token is optionally encrypted by the user's public key and Merchant's private key; (5) when the service is rendered, a service authorization token is to be presented over the point of service (example, hotel room door, airport boarding gate, or theatre entrance, Supermarket check-out counter or rental car etc.) through the wireless network and Internet; (6) if the service authorization token has been validated at the point of service (e.g., decrypting the token using the Merchant's public key successfully) then, the Merchant can authorize the service (e.g., to open the hotel room, to permit the boarding at the airport gate, to admit entering the theater, to discount the transaction amount, to ignite a car, etc.).

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L12: Entry 4 of 6          File: PGPB     pub.   (Feb 21, 2002)

PGPUB-DOCUMENT-NUMBER: 20020023215      filed 6/10/02
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020023215 A1

TITLE: Electronic transaction systems and methods therefor

PUBLICATION-DATE: February 21, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|------|------|-------|---------|---------|
| Wang, Ynjiun P. | Cupertino | CA | US | |
| Ding, Joshua C. | San Jose | CA | US | |
| Grizzard, James A. | San Jose | CA | US | |

APPL-NO: 09/792224 [PALM]
DATE FILED: February 23, 2001

RELATED-US-APPL-DATA:
Application 09/792224 is a continuation-in-part-of US application 09/668213, filed
September 22, 2000, PENDING
Application 09/668213 is a continuation-in-part-of US application 09/523825, filed
March 13, 2000, US Patent No. 6175922
Application 09/523825 is a continuation-in-part-of US application 09/067176, filed
April 27, 1998, US Patent No. 6282656
Application 09/067176 is a continuation-of US application 08/759555, filed December
4, 1996, US Patent No. 5917913

INT-CL: [07] H04 L 9/00, H04 K 1/00

US-CL-PUBLISHED: 713/171; 713/184, 380/259, 380/277
US-CL-CURRENT: 713/171; 380/259, 380/277, 713/184

REPRESENTATIVE-FIGURES: 2

ABSTRACT:

A method and apparatus are disclosed for approving a transaction request between an
electronic transaction system and a portable electronic authorization device (PEAD)
carried by a user using an electronic service authorization token. The method
includes the steps of receiving at the PEAD first digital data representing the
transaction request. The PEAD provides information to the user regarding an ability
to approve the transaction request. When the transaction request is approved by the
user, the PEAD receives second digital data representing the electronic service
authorization token. In one aspect of the invention, the method and apparatus
include a remote agent server that provides a bridge between the electronic
transaction system and the PEAD. In an embodiment providing a further level of
security, the private key is stored on the portable device, encrypted. The
decryption key is stored outside of the device, at a trusted 3.sup.rd party
location. When the user attempts to make a signature the software sends a request
for the decryption key, along with the user's password or pass phrase keyed in at
the keyboard of the PDA, smart phone, or cell phone, to a server belonging to the

trusted 3.sup.rd party. This password is usually, but not always, different than the password stored in the PEAD. The server checks the password or pass phrase and, if it is correct sends the decryption key to the portable device, where it is used once and immediately discarded. In yet another aspect of the invention, the user's password is securely encoded in the method and apparatus and are used at a point-of-sale location. Advantages of the invention include the ability to securely and conveniently perform transactions in a portable device.

RELATED APPLICATIONS

[0001] This application is a continuation in part of U.S. Ser. No. 09/668,213 filed Sep. 22, 2000, which is a continuation in part of U.S. Ser. No. 09/523,825 filed Mar. 13, 2000, now U.S. Pat. No. 6,175,922, which is a continuation in part of U.S. Ser. No. 09/067,176 filed Apr. 27, 1998, which is a continuation of U.S. Ser. No. 08/759,555 filed Dec. 4, 1996 now U.S. Pat. No. 5,917,913.

## WEST

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DOCUMENT-IDENTIFIER: US 20020047775 A1
TITLE: RF remote appliance control/monitoring network

Pre-Grant Publication Date (1):
20020425

Detail Description Paragraph (33):
[0069] The UIRU 80 of each AMS 12 and relay unit 20' has a factory-assigned specific
and unique serial number, as code resident in firmware, also resident in firmware
chip are RF operating parameters for all three basic modes of communications
(television, telephone, and data), and the routing table configured for determining
a best use by the unit when power was first initiated. The RF communications
parameters include frequency bands, bandwidth for each specific band, frequency
allocation tables and RF transmitted power level restriction tables. Each of these
items can be changed later by reprogramming the firmware chip via a remote download
from the head-end transmitter (HTU 18) or by exchanging the firmware module. The
operating parameters of firmware chips are preferably protected with a suitable
encryption scheme and auto-erasable read protection that erases the firmware if an
unauthorized read or copy of any sort is attempted. The firmware chip or module can
also be remotely programmed to lock out a user due to lack of payment for services,
or to change a table of authorized subscription services in the form of
authorization codes for each subscription service optionally provided by the unit.

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L12: Entry 3 of 6                          File: PGPB                    Apr 25, 2002

PGPUB-DOCUMENT-NUMBER: 20020047775
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020047775 A1

TITLE: RF remote appliance control/monitoring network

PUBLICATION-DATE: April 25, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| del Castillo, Byron | Palmdale | CA | US | |
| Ginsburg, Diane L. | Palmdale | CA | US | |
| Rosen, Robert C. | Tujunga | CA | US | |

APPL-NO: 09/ 929834    [PALM]
DATE FILED: August 14, 2001

RELATED-US-APPL-DATA:
Application 09/929834 is a continuation-in-part-of US application 09/234968, filed
January 19, 1999, PATENTED

INT-CL: [07] G05 B 23/02

US-CL-PUBLISHED: 340/3.54; 455/12.1
US-CL-CURRENT: 340/3.54; 455/12.1

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

A system for managing a distributed array of appliances includes a distributed array
of the units, at least some of the relay units being appliance controllers having an
appliance interface. At least some communications are relayed through at least two
other relay units for coverage over a wide range using low power transceivers, based
on automatically generated routing tables that are maintained in the relay units.

RELATED APPLICATION

[0001] This application is a continuation-in-part of application Ser. No,
09/234,968, filed on Jan. 19, 1999, now U.S. Pat. No. 6,275,166, which is
incorporated herein by this reference.

## WEST

☐ [ Generate Collection ]   [ Print ]

PGPUB-DOCUMENT-NUMBER: 20020060246
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020060246 A1

TITLE: Method and apparatus for acquiring, maintaining, and using information to be communicated in bar code form with a mobile communications device

PUBLICATION-DATE: May 23, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Gobburu, Venkata T. | San Jose | CA | US | |
| Narayanan, Krishnakumar | Cupertino | CA | US | |
| Challa, Nagesh | Saratoga | CA | US | |
| Gannage, Michel E. | Los Altos | CA | US | |

APPL-NO: 09/ 996847   [PALM]
DATE FILED: November 19, 2001

RELATED-US-APPL-DATA:
Application is a non-provisional-of-provisional application 60/252101, filed November 21, 2000,
Application is a non-provisional-of-provisional application 60/252346, filed November 20, 2000,
Application is a non-provisional-of-provisional application 60/313753, filed August 20, 2001,

INT-CL: [07] G06 K 7/10

US-CL-PUBLISHED: 235/462.46
US-CL-CURRENT: 235/462.46

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

A user is provided with a secure database containing information in diverse categories that relates to the user and that may be represented at least in part in bar code form and communicated with light from a mobile communications device. The diverse information is obtained from any combination of a variety of vendor and governmental computer systems, internet service providers, and communications devices. The user has access to the database using a mobile communications device for displaying, managing, and entering information, and for communicating information in bar code form with light. The user first selects the category that contains the specific item of information, and then selects the specific item of information. The specific item of information then is communicated in bar code form with light from the mobile communications device for scanning by a bar code scanner to obtain the desired good or service.

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. provisional application No. 60/252,101, filed Nov. 21, 2000 (Gobburu et al., Method and apparatus for acquiring, maintaining and using information to be communicated in bar code form with a mobile communications device, Attorney Docket No. A1132US1V); U.S. provisional application No. 60/252,346, filed Nov. 20, 2000 (Gobburu et al., Method and apparatus for acquiring, maintaining and using information to be communicated in bar code form with a mobile communications device, Attorney Docket No. A1132US0V); and U.S. provisional application No. 60/313,753, filed Aug. 20, 2001 (Gobburu et al., Method and apparatus for acquiring, maintaining and using information to be communicated in bar code form with a mobile communications device, Attorney Docket No. 10075.03); all of which are hereby incorporated herein by reference in their entirety.

**WEST**

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DOCUMENT-IDENTIFIER: US 20020060246 A1
TITLE: Method and apparatus for acquiring, maintaining, and using information to be
communicated in bar code form with a mobile communications device

Pre-Grant Publication Date (1):
20020523

Detail Description Paragraph (37):
[0082] The user may, if desired, pay for tickets as well as other goods and services
at a point-of-sale using her mobile communications device, and have the transaction
recorded in an appropriate subordinate folder in the user's My Transactions
database. Payment is made using any mobile payment technique, which may or may not
involve the communication of information in bar code form One example of a mobile
payment technique is the smart card phone, which is a mobile phone that has a
built-in smart card reader. The user places an order to purchase a good or service
using the mobile phone in any desired manner. The merchant's server sends a payment
request to the mobile phone. The user then inserts her smart card, which is a charge
card with a small embedded computer chip that enables applications such as security,
electronic purse, history, loyalty, identification, and so forth. The mobile phone
requests a personal identification number ("PIN") to for authentication. If the PIN
is correct, the phone assembles a data package containing the order number as well
as the account information and shipping information from the smart card, and sends
the data package to the merchant's server. The merchant's server in turn sends an
order confirmation to the mobile phone and suitably places a record of the
transaction in the user's My Transactions database. Another example of a mobile
payment technique is the mobile-accessed bank wallet, or e-wallet. This technique
involves having the user's account information stored on a bank's server. The user
places an order to purchase a good or service using a mobile phone in any desired
manner, and the merchant returns an order confirmation. The user then logs into her
e-wallet on the bank's server using her name and PIN. Upon authentication, the
mobile phone sends the order information to the bank's server and the user selects
the account and shipping address. The bank's server sends the authorization
information to the merchant's server, which in turn sends a confirmation to the
user's mobile phone and suitably places a record of the transaction in the user's My
Transactions database. Another example of a mobile payment technique is the storage
of smart card data in the mobile phone itself. The user places an order to purchase
a good or service using the mobile phone in any desired manner. The merchant's
server sends a payment request to the mobile phone. The user's mobile phone contains
a subscriber identity module ("SIM" card) which stores the user's authentication,
account, and shipping information. The mobile phone requests a PIN to authenticate
the user. If the PIN is correct, the phone assembles a data package containing the
order number as well as the account information and shipping information from the
subscriber identity module, and sends the data package to the merchant's server. The
merchant's server in turn sends an order confirmation to the mobile phone and
suitably places a record of the transaction in the user's My Transactions database.
Another example of a mobile payment technique is mobile phone verification. The user
places an order to purchase a good or service in any desired manner, even at a
physical point-of-sale, and also provides her mobile phone number. The merchant's
server sends a payment request to the mobile phone. The user reviews and confirms
the order and enters her pin for authentication, and the user's mobile phone
assembles and sends a data package to the bank's server. The bank's server sends the
authorization information to the merchant's server, which in turn sends a

confirmation to the user and suitably places a record of the transaction in the user's My Transactions database. Another example of a mobile payment technique is redeeming a prepaid coupon or voucher, which is done in a manner similar to the redemption of any coupon. In this type of mobile payment technique, the coupon or voucher number is displayed on the user's mobile communications device or otherwise communicated with light as a bar code. The communicated bar code is scanned and processed by the vendor in a conventional manner. The payment processes mentioned above preferably are protected by suitable security measures such as encryption to prevent unauthorized access. Some of the proposals for mobile commerce are described on the web site of MasterCard International Incorporated of Purchase, New York, at www.mastercardintl.com/newteclmology/mcommerce/wha- tis/payment.htrnl, which is incorporated herein by reference in its entirety.

**WEST**

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L7: Entry 1 of 1                      File: USPT                      Mar 11, 2003

US-PAT-NO: 6532298
DOCUMENT-IDENTIFIER: US 6532298 B1

TITLE: Portable authentication device and method using iris patterns

DATE-ISSUED: March 11, 2003

INVENTOR-INFORMATION:                    .

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|------|------|-------|----------|---------|
| Cambier; James L. | Medford | NJ | | |
| Siedlarz; John E. | Indian Mills | NJ | | |

ASSIGNEE-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY | TYPE CODE |
|------|------|-------|----------|---------|-----------|
| Iridian Technologies, Inc. | Moorestown | NJ | | | 02 |

APPL-NO: 09/ 396083    [PALM]
DATE FILED: September 14, 1999

PARENT-CASE:
RELATED APPLICATION DATA This is a continuation-in-part of U.S. patent application
Ser. No. 09/310,302 which was filed May 12, 1999, which is a continuation-in-part of
U.S. patent application Ser. No. 09/199,369 which was filed Nov. 25, 1998.

INT-CL: [07] G06 K 9/00

US-CL-ISSUED: 382/117; 340/5.82
US-CL-CURRENT: 382/117; 340/5.82

FIELD-OF-SEARCH: 382/110, 382/117, 382/115, 382/116, 351/206, 351/218, 351/209,
340/5.2, 340/5.52, 340/5.53, 340/5.81-5.83

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| Search Selected |  | Search ALL |

| | PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|---|---|---|---|---|
| ☐ | 4109237 | August 1978 | Hill | 340/146.3E |
| ☐ | 4620318 | October 1986 | Hill | 382/2 |
| ☐ | 4641349 | February 1987 | Flom et al. | 382/2 |
| ☐ | 4876608 | October 1989 | Eaton | 358/443 |
| ☐ | 5055658 | October 1991 | Cockburn | 235/382 |
| ☐ | 5109390 | April 1992 | Gilhousen et al. | 375/1 |
| ☐ | 5151583 | September 1992 | Tokunaga et al. | 250/201.2 |
| ☐ | 5175758 | December 1992 | Levanto et al. | 379/57 |
| ☐ | 5187506 | February 1993 | Carter | 351/221 |
| ☐ | 5291560 | March 1994 | Daugman | 382/2 |
| ☐ | 5359669 | October 1994 | Shanley et al. | 382/6 |
| ☐ | 5392297 | February 1995 | Bell et al. | 371/22.6 |
| ☐ | 5404163 | April 1995 | Kubo | 348/142 |
| ☐ | 5448622 | September 1995 | Huttunen | 379/58 |
| ☐ | 5485486 | January 1996 | Gilhousen et al. | 375/205 |
| ☐ | 5572596 | November 1996 | Wildes et al. | 382/117 |
| ☐ | 5581630 | December 1996 | Bonneau, Jr. | 382/116 |
| ☐ | 5629981 | May 1997 | Nerlikar | 380/25 |
| ☐ | 5646709 | July 1997 | Carter | 351/218 |
| ☐ | 5719950 | February 1998 | Osten et al. | 382/115 |
| ☐ | 5751260 | May 1998 | Nappi et al. | 345/8 |
| ☐ | 5751836 | May 1998 | Wildes et al. | 382/117 |
| ☐ | 5790957 | August 1998 | Heidari | 455/553 |
| ☐ | 6289113 | November 2001 | McHugh et al. | 382/117 |

## FOREIGN PATENT DOCUMENTS

| FOREIGN-PAT-NO | PUBN-DATE | COUNTRY | US-CL |
|---|---|---|---|
| 97302580.2 | April 1997 | EP | |
| 9611787.4 | June 1996 | GB | |
| 9621900.1 | October 1996 | GB | |
| WO 97/21188 | June 1997 | WO | |
| WO 97/46978 | December 1997 | WO | |
| WO 97/46979 | December 1997 | WO | |
| WO 97/46980 | December 1997 | WO | |
| WO 98/08439 | March 1998 | WO | |
| WO 98/32093 | July 1998 | WO | |

ART-UNIT: 2611

PRIMARY-EXAMINER: Mehta; Bhavesh

ATTY-AGENT-FIRM: Woodcock Washburn LLP

ABSTRACT:

A compact, handheld imaging apparatus which can be used to capture high-quality iris
images for identification of a person. The handheld iris imager is non-invasive and
non-contacting and comprises a camera, a cold mirror, a lens, and an illuminator.
The imager has sensors and indicators which assist a user in aligning and focusing
the device. The imager also automatically captures the image when proper positioning
is achieved. A template of the image is then transmitted to a receiver in a vehicle
or other asset and compared to a database of previously stored templates of images
to identify the person. The imager is part of a security module to protect access to
an asset such as a vehicle or residence. The vehicle or residence cannot be unlocked
and used unless a user has been identified and authorized by the imager and a
controller system.

12 Claims, 17 Drawing figures

**WEST**

**End of Result Set**

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L8: Entry 1 of 1                    File: USPT                    Mar 11, 2003

DOCUMENT-IDENTIFIER: US 6532298 B1
TITLE: Portable authentication device and method using iris patterns

US Patent No. (1):
6532298

Detailed Description Text (30):
Specific implementation features of the preferred focus assessment system and method
which enable its real-time operation, include (1) the computation of quantities in
the 2D Fourier domain, without needing to compute an actual 2D Fourier Transform of
an image (this avoids the need for approximately 2.25 million floating-point
operations required for an FFT (Fast Fourier Transform) on a 500.times.500 pixel
image, as the computational complexity of an FFT on n .times.n data is O(n.sup.2
log.sub.2 n)); (2) only 6,400 integer multiplications (squarings) are performed,
which in turn can be eliminated altogether by using small look-up tables; (3) no
floating-point operations are required; (4) computation of focus scores is based
upon simple algebraic combinations of pixel values within local closed
neighborhoods, repeated across regions of the image; and (5) these operations not
only allow the algorithm to execute in real-time, but it also enables a
straightforward implementation in simple, low-cost, hardware devices that could be
embedded within a digital camera or frame grabber.

Detailed Description Text (76):
Preferably, the imager 920 is compact, light weight, low cost, and battery-powered.
IR LED illumination, CMOS imagers, low power embedded processors, nonvolatile RAM or
EEPROM memory, and RF chipsets designed for 900 MHz or 2.4 GHz public use frequency
bands can be used. The controller system 940 can rely on external power from the
vehicle storage battery or public utilities (in the case, for example, of a
residence or office).

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**End of Result Set**

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L12: Entry 6 of 6              File: DWPI              Jan 31, 1995

DERWENT-ACC-NO: 1995-081803
DERWENT-WEEK: 199511
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TITLE: Automatic actuation of cellular telephones - has control program which
desired pair of hardware and firmware drivers with operating circuitry and command
necessary for controlling selected telephone

INVENTOR: COOPER, G N

PATENT-ASSIGNEE: ALLIANCE RESEARCH CORP (ALLIN)

PRIORITY-DATA: 1994US-0177275 (January 4, 1994)

PATENT-FAMILY:

| PUB-NO | PUB-DATE | LANGUAGE | PAGES | MAIN-IPC |
|---|---|---|---|---|
| US 5386455 A | January 31, 1995 | | 007 | H04M011/00 |

APPLICATION-DATA:

| PUB-NO | APPL-DATE | APPL-NO | DESCRIPTOR |
|---|---|---|---|
| US 5386455A | January 4, 1994 | 1994US-0177275 | |

INT-CL (IPC): H04 M 11/00

ABSTRACTED-PUB-NO: US 5386455A
BASIC-ABSTRACT:

The system, interacting with an activating computer of a local cellular telephone
carrier and a cellular telephone unit, for the automatic remote activation of the
cellular telephone with the carrier has a CPU containing and operating in accord
with a control program. The CPU stores hardware and firmware drivers with the
operating circuitry and commands necessary for controlling a selected cellular
telephone. The control program selects a desired hardware and firmware driver for
activation programming of the cellular telephone.

An input allows manual data input into the CPU. A cable connects the CPU to the
Input/Output data interface bus port for transferring data. A modem transfers data
between the CPU and a local carrier authorising computer. The control program
transfers manually received data to the activating computer and transfers data from
the activating computer to the cellular telephone in accordance with the selected
hardware and firmware drivers for activation programming of the cellular telephone.

USE/ADVANTAGE - Reduces time required for programming or activation. Insures correct
exchange of activation programming information.

ABSTRACTED-PUB-NO: US 5386455A
EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.3/3

```
DERWENT-CLASS: W01
EPI-CODES: W01-B05A1A; W01-C02B6A;
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## End of Result Set

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L12: Entry 6 of 6        File: DWPI        Jan 31, 1995

DERWENT-ACC-NO: 1995-081803
DERWENT-WEEK: 199511
COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Automatic actuation of cellular telephones - has control program which
desired pair of hardware and firmware drivers with operating circuitry and command
necessary for controlling selected telephone

Basic Abstract Text (2):
An input allows manual data input into the CPU. A cable connects the CPU to the
Input/Output data interface bus port for transferring data. A modem transfers data
between the CPU and a local carrier authorising computer. The control program
transfers manually received data to the activating computer and transfers data from
the activating computer to the cellular telephone in accordance with the selected
hardware and firmware drivers for activation programming of the cellular telephone.

PF Publication Date (1):
19950131

**End of Result Set**

L15: Entry 1 of 1                    File: USPT                    Jan 16, 2001

DOCUMENT-IDENTIFIER: US 6175922 B1
TITLE: Electronic transaction systems and methods therefor

US Patent No. (1):
6175922

Detailed Description Text (73):
One of the preferred embodiment is using an Internet enabled cellular telephone
(e.g. a web phone), a wireless PDA or a wireless two way pager to implement the PEAD
to perform the above applications. The description below uses an Internet enabled
cellular telephone as example of the implementation, and those skilled in the art
will understand that the same or similar method can be applied to wireless PDAs and
two way pagers. The Internet enabled cellular phone (web phone) can communicate with
the Internet through a wireless network. For example, currently SprintPCS provides
an Internet phone service using NeoPoint 1000 web phone. The web phone can access
the Internet through a wireless gateway, and can contact the hotel's Internet
reservation system through the wireless network and Internet. The software and/or
firmware controls the PEAD functions running in the web phone is called eSignX Agent
(or xAgent for short). xAgent is under the user's control to contact the hotel
reservation transaction system. The reservation transaction process includes: (1)
the web phone (PEAD) sending out the reservation request (optional using merchant
public key [in the example given here, the merchant is the hotel, then it would be
the hotel's public key or it's certificate] to encrypt the request; optionally using
the user's private key to sign the request); (2) the Merchant acknowledges with the
service availability and the cost (optionally, this message can be encrypted using
the user's public key and the hotel's private key); (3) once the user approves the
transaction, the web phone sends out the transaction confirmation with the credit
information and signed by the user's private key (optionally encrypted with the
Merchant's public key); (4) once the Merchant validates the transaction, the
Merchant sends out the service information as well as the service authorization
token (the token could be the electronic room key in the hotel reservation example,
the token could be the electronic ticket in the Airline Ticket Reservation and
Theater Ticket reservation examples, or the token could be the Supermarket coupon
etc. The token is optionally encrypted by the user's public key and Merchant's
private key; (5) when the service is rendered, a service authorization token is to
be presented over the point of service (example, hotel room door, airport boarding
gate, or theater entrance, Supermarket check-out counter or rental car etc.) through
the wireless network and Internet; (6) if the service authorization token has been
validated at the point of service (e.g. decrypting the token using the Merchant's
public key successfully) then, the Merchant can authorize the service (e.g. to open
the hotel room, to permit the boarding at the airport gate, to admit entering the
theater, to discount the transaction amount, to ignite a car, etc.)

Detailed Description Text (76):
It is also possible to use an ordinary cellular phone not necessarily having web
capability to perform both above Service Reservation Transaction and Point-of-Sale
Transaction by using a remote voice activated or touch tone server. For example,
this is called an Agent Server. The Agent server functions exactly likes the PEAD in
a Web phone except it is not necessarily portable. It operates through the existing
voice activated or touch tone interfacing with the end user through the existing
phone network. Once the user registers an xAgent in the Agent Server, the ordinary

cellular phone end user can enjoy all the same functionality as the Web phone user. For example, the end user can use the ordinary cellular phone to dial in to the Agent Server to activate his own xAgent by entering his xAgent password through voice activated interface or touch tone interface. Once xAgent is activated, it can reserve a hotel room, order tickets, pay at a point-of-sale counter through the Agent Server, just as if it were running on a Web phone. For example, the end user can reserve the a hotel room, once the xAgent gets the approval from the user's cellular phone, the xAgent running on the Agent Server can exchange the credit information pre-stored in the xAgent and sign the transaction. The hotel can issue the electronic room key to the xAgent in the Agent Server just the same as to the PEAD. When the end user arrives at the hotel, he can dial the Agent Server number to request to activate the electronic room key stored in the xAgent to open the door through the Internet. Similarly, all other applications that can be conducted through a Web phone, can also be conducted by the ordinary cellular phone plus the remote running xAgent in the Agent Server.

**WEST**

## End of Result Set

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L4: Entry 1 of 1                    File: USPT                    Jun 29, 1999

DOCUMENT-IDENTIFIER: US 5917913 A
TITLE: Portable electronic authorization devices and methods therefor

US Patent No. (1):
5917913

Detailed Description Text (29):
Again, note that access to program/data memory 504 and the data therein (e.g., the user identification data and the user's private key) can only be made by logic circuitry 502. For example, the user identification data and the user's private key can only be written into program/data memory 504 if this data has been properly encrypted with the issuer's private key. Access to these memory blocks for writing thereto may also be restricted by logic circuitry 502 under appropriate software and/or firmware control.

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## End of Result Set

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L11: Entry 2 of 2        File: PGPB        Jul 26, 2001

PGPUB-DOCUMENT-NUMBER: 20010009849
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20010009849 A1

TITLE: Prepay telecommunications system

PUBLICATION-DATE: July 26, 2001

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|------|------|-------|---------|---------|
| Hanson, Daniel A. | Dallas | TX | US | |

APPL-NO: 09/ 793064    [PALM]
DATE FILED: February 26, 2001

RELATED-US-APPL-DATA:
Application 09/793064 is a continuation-of US application 09/399915, filed September 21, 1999, US Patent No. 6208851

INT-CL: [07] H04 Q 7/20

US-CL-PUBLISHED: 455/408; 455/432, 455/411
US-CL-CURRENT: 455/408; 455/411, 455/432.1

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

The prepay telecommunications system (60) includes a prepay call management platform (50) which is directly coupled to a telecommunications carrier switch (24). A customer database (116) is coupled to the prepay call management platform (50) for storing prepay customer data, and a plurality of customer interface facilities (62, 64, 66, 68, 80) are provided for accepting customer prepayment and immediately updating the customer database (116). The prepay calls are recognized by the mobile identification number and is routed to the prepay call management platform (50) coupled to and co-located with the telecommunications carrier switch (24). The customer account balance associated with the prepay call is looked up in a customer database (116), and the maximum allowable call duration in response to the customer account balance is computed. The prepay call is then released to the telecommunications carrier switch (24) for line termination. At the same time, a call duration timer is started. The call is disconnected in response to the call duration timer reaching the maximum allowable call duration. The prepay telecommunications system is applicable to both wireless and non-wireless telecommunications systems.

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## End of Result Set

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L11: Entry 2 of 2          File: PGPB          Jul 26, 2001

DOCUMENT-IDENTIFIER: US 20010009849 A1
TITLE: Prepay telecommunications system

Pre-Grant Publication Date (1):
20010726

Detail Description Paragraph (9):
[0024] In operation, cash, bank drafts, credit cards, and telephone company billing
may be used to replenish the prepay wireless account at any customer interface
facility 62. A deposit card (not shown) which has a magnetic strip, embedded chip,
or another storage medium recording the customer's name and account number may be
issued to each customer. Customer interface facilities 62 preferably employ data
card readers 69 to obtain the information stored in the customer's deposit card and
to immediately relay this information and the transaction amount to the customer's
home prepay wireless platform 50. The transaction amount is then immediately posted
to the customer's account to reflect the new balance. This transaction is similar to
a credit card or debit card transaction at a point of sale (POS). If authorized, the
customer may also dial a pre-assigned code with the wireless telephone to replenish
his/her account with a credit card. Constructed in this manner, the customer may
immediately begin to use the wireless services.

# WEST

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US-PAT-NO: 5905252
DOCUMENT-IDENTIFIER: US 5905252 A

TITLE: Card gate mechanism

DATE-ISSUED: May 18, 1999

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|------|------|-------|----------|---------|
| Magana; Leroy Esteban | Fontana | CA | | |

ASSIGNEE-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY | TYPE CODE |
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| ITT Manufacturing Enterprises, Inc. | Wilmington | DE | | | 02 |

APPL-NO: 08/ 976947    [PALM]
DATE FILED: November 24, 1997

INT-CL: [06] G06 K 13/00

US-CL-ISSUED: 235/475; 235/483, 235/485
US-CL-CURRENT: 235/475; 235/483, 235/485

FIELD-OF-SEARCH: 235/495, 235/475, 235/449, 235/483, 235/375, 235/379, 235/380, 235/451, 235/485

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| Search Selected | | Search ALL |

| | PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|---|---|---|---|---|
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| ☐ | 5017764 | May 1991 | Hashimoto | 235/454 |
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| ☐ | 5532466 | July 1996 | Konno et al. | 235/472 |
| ☐ | 5640307 | June 1997 | Bleier et al. | 235/475 |

ART-UNIT: 286

PRIMARY-EXAMINER: Porta; David P.

ASSISTANT-EXAMINER: Lee; Diane I.

ATTY-AGENT-FIRM: Peterson; Thomas L.

ABSTRACT:

Apparatus for use in an unsupervised public setting to receive a smart card so the
card front portion can enter a card reader (20), which safeguards the card reader
from vandalism. A card gate mechanism (30) includes a gate device (32) that is
moveable between a closed position wherein it blocks the card path (16) and an open
position which allows passage of the card to the card reader. At least one lever
(34, 36, 38) has a card-engaging part (50, 52, 72) lying along the card path so the
lever is deflected by the leading edge (46) of the card to release the gate device
so it can open. Preferably, a plurality of card-engaging levers have card-engaging
parts which must be deflected by the card leading edge to allow the gate to open,
with at least one and preferably two of the levers deflected to the side of the card
path by the leading edge of the card. The gate has a roller (100) that rolls along
the top of the card when the gate is raised, to avoid scratching the card. A well
(110) lies across the entire width of the card path between the card-passing slot
and the gate device, to receive any debris that is inserted into the slot.

8 Claims, 9 Drawing figures

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L10: Entry 5 of 7             File: USPT           May 18, 1999

DOCUMENT-IDENTIFIER: US 5905252 A
TITLE: Card gate mechanism

Application Filing Date (1):
19971124

Detailed Description Text (2):
FIG. 1 shows a card receiving assembly or apparatus 10 for receiving a smart card C.
One standard (according to American National Standards Institute) smart card has a
width in the lateral direction L of 85.6 mm and a thickness or height in the
vertical direction H of about 0.84 mm. A group of contact pads P on the lower face E
of the card provide access to an embedded IC memory chip Q. The memory is read out
and/or read in, by inserting the card in the forward F longitudinal direction M
through a card slot 12 in a housing 14 of the apparatus. When the card is inserted,
its forward portion J moves forwardly along a card path 16 that has an axis 18 and
to a card reader 20 that has contacts 22 for engaging the card pads. A switch lying
about 1 mm rearward of the final position of the card leading edge, is activated by
the card. This allows electronic circuitry 24 connected to the contacts 22 to at
least read out information stored in the card. The apparatus 10 may be used to
authorize placement of a telephone call, dispense goods or money, or otherwise
provide authorizations.

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L10: Entry 2 of 7                    File: USPT                    May 2, 2000


DOCUMENT-IDENTIFIER: US 6058300 A
TITLE: Prepay telecommunications system


Application Filing Date (1):
19970204

Detailed Description Text (10):
In operation, cash, bank drafts, credit cards, and telephone company billing may be
used to replenish the prepay wireless account at any customer interface facility 62.
A deposit card (not shown) which has a magnetic strip, embedded chip, or another
storage medium recording the customer's name and account number may be issued to
each customer. Customer interface facilities 62 preferably employ data card readers
69 to obtain the information stored in the customer's deposit card and to
immediately relay this information and the transaction amount to the customer's home
prepay wireless platform 50. The transaction amount is then immediately posted to
the customer's account to reflect the new balance. This transaction is similar to a
credit card or debit card transaction at a point of sale (POS). If authorized, the
customer may also dial a pre-assigned code with the wireless telephone to replenish
his/her account with a credit card. Constructed in this manner, the customer may
immediately begin to use the wireless services.